

compete in an increasingly technical world. The ability to use computer technology has become indispensable to educational, career, social and cultural advancement. In the new millennium, technological literacy has not become only a basic job requirement, but a life skill as well. It is imperative that students are equipped with technology skills at an early stage in life by teachers who are skillfully trained to incorporate technology in their curriculum and classroom learning environments.

According to the National Center for Education Statistics, Internet access in public schools has increased from 35% to 95% and classroom connections have increased from 3% to 63% from 1994 to 1999. While these increases indicate positive responses to the need for technology in the classroom, we must be cognizant of how efficiently and effectively this technology is being used. According to the President's 1997 Committee of Advisors on Science and Technology, a ratio of 4 to 5 students per computer represents a reasonable level for the effective use of computers within schools. In my Congressional District, the ratios are much higher. In the city of Compton, the ratio is 18 students per computer. In the city of Lynwood the ratio is 9 students per computer and in Long Beach the ratio is 8 students per computer. Considering the socioeconomic demographics of my district, these numbers are just not acceptable. The children in my district and in similar districts across the country are falling behind and something must be done to stop it.

Equipping our schools with technology is the first step in fulfilling the challenge to promote technological literacy in our schools. Another real challenge lies in filling the vast training gap, and in providing trained teachers who can incorporate computer technology in all aspects of the learning experience. A study by the National Center for Education Statistics found that only one teach in five felt very prepared to integrate technology in the subject they taught. This fact is not surprising when, according to a study by the Milken Exchange on Education Technology, teachers on average receive less than 13 hours of technology training year per, and 40 percent of all teachers have never received any technology training. In addition, teachers receive far less technology curriculum integration training than basic computer skills training. 42 percent of teachers had six or more hours of basic skills training within the past year, compared with just 29 percent of teachers who had an equal amount of curriculum integration training. And yet, research shows that training on integrating technology into education programs has a greater impact on teachers than basic technology skills training. Clearly, the key to successfully integrating technology into the classroom will not be in installing more hardware or software, or wiring schools to the Internet. The key will be in training teachers to be the integrators.

Now is the time for action. The U.S. Department of Commerce estimates that by the end of the year 2000, some 60 percent of jobs will require proficiencies in the use of a broad range of information technologies. By the year 2005, the Bureau of Labor Statistics estimates there will be growth of 70 percent in technology related jobs. This issue, however, is not focused solely on preparing students to assume the jobs of the future. More important is the need to prepare students for American

life and culture, both of which will be influenced heavily by technology. In order to produce a citizenry ready to accept upcoming technological challenges, we must be willing to make a significant investment in education. By preparing teachers and students we are paving the way to a brighter more prosperous future.

Mrs. CLAYTON. Well, I get the understanding, and let me correct myself, my understanding is actually there is a requirement they must be professionals. I think there is a standard. So I did not mean to suggest that. I think they are either engineers and meet a certain requirement and may have worked a year. I am not sure, but I think there is even a dollar amount for which they cannot go below.

I am just saying that as we approach this, why do we not look at the education system and say how can we use this need in the community as a way to stimulate our high schools and colleges and our private sector to have a more rigorous curriculum and a commitment to hire so the next time around we will be ready to meet this criteria and use the same experience we have had before.

Again, I want to commend the gentleman.

Mr. ETHERIDGE. Mr. Speaker, I thank the gentlewoman, and I see now that my friend from Maryland is here, and I appreciate his being here this evening and I would yield to him.

Mr. CUMMINGS. I want to thank the gentleman for his leadership in this area, and I certainly want to thank my two colleagues with us this evening.

As I was listening to the discussion, I could not help but think about a program in my district where Morgan State University works with an elementary school. They have about 40 students that work with elementary school students, mainly concentrating on the areas of science and math. So these young children are exposed to these Morgan State University college students, and they become interested after school in science and math; and they are doing extremely well.

I really believe that we have to teach the children's strengths. I always think about the story of Steven Spielberg when he was a little boy. Apparently his mother did not have very much money, but she got him a camera because he had told her he was interested in a camera. So he got a little simple camera, and he began to take pictures and make little slides and then movies, and the next thing you know, look where he is. But she saw where his strength was and she went there.

As I was listening to the things that the gentlewoman was saying, she is so right, because just a few weeks ago I was sitting in a meeting with hospitals from Maryland, and they were sitting there talking about how they needed to go outside the country to get nurses. Yet I have young people who are in my district who, if they were exposed at an early age and given some encouragement and nourishment and taken into

the hospitals or whatever, might very well be the nurses that they are looking for. Yet they are going beyond the borders of our community trying to find nurses.

So we are fortunate, and I pointed out to them, that we have another project, Johns Hopkins Hospital, which has been ranked number one in the country, has a program with a high school, Dunbar High School, where they actually bring in young high school students into the hospital working with doctors, learning about various professions in the medical field. That program has been going on for 20 years, and a lot of those students are now going into the medical profession. Why? Because they were exposed to something. Why else? Because they had an opportunity.

So the President said today at the National Association for the Advancement of Colored People, many of us have the intellect, but not all of us get the opportunities. So I do appreciate what the gentlewoman has said as well as the gentleman from North Carolina.

Mr. DREIER. Mr. Speaker, will the gentleman yield?

Mr. ETHERIDGE. I yield to the gentleman from California.

Mr. DREIER. Mr. Speaker, I want to thank the gentleman from North Carolina and congratulate him on the special order he is leading now, and to wish all my colleagues a great weekend as they proceed with their return to their districts.

Mr. ETHERIDGE. I thank the gentleman.

I also thank the gentleman from Maryland, Mr. Speaker, and if he will yield for just a moment more. As we are talking about this whole thing of education and mathematics and opportunity for young people and giving them a challenge and a vision, I would just tell the gentleman that the students in my home State of North Carolina, where we have paid a lot of attention, as have a lot of others to this whole issue of mathematics over the last several years in education, as I was talking earlier on regarding the NAPE scores, which really measures mathematics, their national average scores have gone up three times the national average over the last several years on the NAPE scores, because we have paid a lot of attention to it. We have measured it. Some of the greatest gains have come from our minority students, which is crucial, because we have absolutely no child that we can waste in the 21st century. All of our students are so needed as we get there.

And we have other good news as well that I will share with the gentleman and then yield back to him. Student science achievement is improving, and that is important. SAT scores have increased dramatically, not only in my State but we have seen them go up across the country. A lot of people have battered public education and beaten down our teachers and others. They fail to hear these good things